

Ukrite extrémny fee  $f$  na daném intervalu:

1)  $f(x) = x^2 - 3x + 4$   $\langle 0; 2 \rangle$   $[\min[\frac{3}{2}, \frac{7}{4}], \max[0, 4]]$

2)  $f(x) = \frac{x^3}{3} - x^2 - 3x$   $\langle -2; 9 \rangle$   $[\min[3, -9], \max[9, 135]]$

3)  $f(x) = x^3 - 2x^2 + 11$   $\langle -3; 3 \rangle$   $[\min[-3, -39], \max[3, 20]]$

4)  $f(x) = \sin x - \cos x$   $\langle 0; \frac{\pi}{2} \rangle$   $[\min[0, -1], \max[\frac{\pi}{2}, 1]]$

5)  $f(x) = x^4 - 2x^2 + 1$   $\langle -2; 2 \rangle$   $[\max[\pm 2, 9], \min[\pm 1, 0]]$

6)  $f(x) = x^4 - x^3$   $\langle -1; 3 \rangle$   $[\max[3, 54], \min[\frac{3}{4}, \frac{-27}{256}]]$

7)  $f(x) = 2x^3 - 6x^2 + 23$   $\langle 0; 5 \rangle$   $[\max[5, 123], \min[2, 15]]$

8)  $f(x) = x^4 + 2x^2 - 20$   $\langle -2; 2 \rangle$   $[\max[\pm 2, 4], \min[0, -20]]$

9)  $f(x) = \sqrt{9 - 4x^2}$  na Df  $[\max[0, 3], \min[\pm \frac{3}{2}, 0]]$

10) ~~na Df~~ na Df  $f(x) = \sqrt{4 - x^2}$   $[\max[0, 2], \min[\pm 2, 0]]$

11)  $f(x) = \sqrt{4x - x^2}$  na Df  $[\max[2, 2], \min[0, 0], [4, 0]]$